



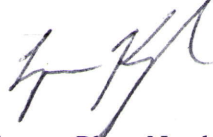
State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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July 5, 2000

TO: File

FROM: Lynn Kunzler, Senior Reclamation Specialist 

RE: Review comments for the September, 1996 Closure Plan, North Lily Mining Company, North Lily Tintic Project, M/023/007, Juab County, Utah

Attached to the referenced document as Appendix 1, is a reclamation plan (for Silver City Operations) that is assumed will be used for final closure at the Tintic Project. After reviewing the plan, the following concerns were raised with respect to the fertilization and mulching plans and seed mix proposed for final revegetation.

The proposed fertilization plan calls for an application of 200 lbs/acre of Diammonium phosphate. Fertilization at this rate would be expected to enhance weedy plant establishment at the expense of establishment of the desired seeded species.

It is proposed to mulch reclaimed areas with 2 tons/acre of straw or weed free hay. Past experience has demonstrated that mulch has not been effective in increasing soil organic matter or establishment of vegetation and has only been of benefit in highly erodible areas.

To remedy these concerns, the Division proposes the use of an application of composted manure at a rate of 10 tons/acre. This has been very effective on other similar sites for long-term establishment of a permanent vegetation cover.

The proposed seed mix (and planting rate) is likely to result in a near mono-culture of crested wheatgrass in just a few years. This is not in line of the intended post mining land use of wildlife habitat and grazing. Attached to this memo is a proposed seed mix that is expected to meet the post mining land use objectives.

Attachment: recommended seed mix  
m023-007 reveg.wpd

Recommended Revegetation Species List  
for

**North Lily Mining Company**  
North Lily Tintic Project  
M/023/007

<u>Common Name</u>	<u>Species Name</u>	<u>*Rate lbs/ac (PLS)</u>
Crested wheatgrass	<u>Agropyron cristatum</u>	0.5
Thickspike wheatgrass	<u>Agropyron dasystachum</u>	2.0
Bluebunch wheatgrass	<u>Agropyron spicatum</u>	2.0
Intermediate wheatgrass	<u>Agropyron intermedium</u>	1.0
'Piute' orchard grass	<u>Dactylis glomerata</u>	0.5
Basin Wildrye	<u>Elymus cinereus</u>	2.0
Ladac Alfalfa	<u>Medicago sativa</u>	1.0
Yellow sweetclover	<u>Melilotus officinalis</u>	0.5
Palmer penstemon	<u>Penstemon palmerii</u>	0.5
Small burnet	<u>Sanguisorba minor</u>	1.5
Mountain big sagebrush	<u>Artemisia tridentata vaseyana</u>	0.1
Rubber rabbitbrush	<u>Chrysothamnus nauseosus</u>	0.5
Forage kochia	<u>Kochia prostrata</u>	0.5
Bitterbrush	<u>Purshia tridentata</u>	1.0
Woods rose	<u>Rosa woodsii</u>	1.0
Total		14.6 lbs/ac

This rate is for broadcast seeding methods.

Revised 11/7/97